

Pratt Institute

Brooklyn Rew York



Handbook World's Fair Edition



Handbook of::::

Pratt Institute



Brooklyn, New York



MDCCCXCII - MDCCCXCIII

BOARD OF TRUSTEES

CHARLES M. PRATT, President

GEO. D. PRATT

Frederic B. Pratt. Sec'y and Treasurer

ASSOCIATE COUNCIL

FRANK L. BABBOTT

WM. J. COOMBS CHAS. O. GATES

JOHN GIBB

CHAS. H. HALL

JOHN HUMPSTONE

ROBERT J. KIMBALL

HAYDEN W. WHEELER

WM. A. WHITE

FACULTY

Frederic B. Pratt, Chairman NORMAN P. HEFFLEY, Secretary

WM. A. McANDREW

EMMA O. CONRO

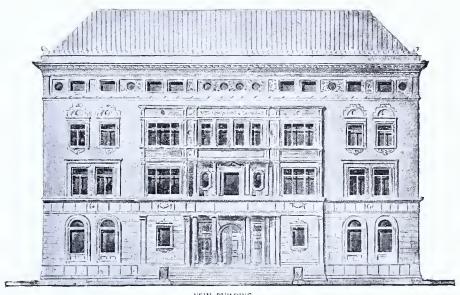
Walter S. Perry

CHARLES R. RICHARDS

HARRIET S. SACKETT

HANNAH D. MOWRY

MARGARET HEALY



NEW BUILDING

INSTRUCTORS AND ASSISTANTS

HIGH SCHOOL

WILLIAM A. McANDREW	Principal
CHARLES M. ALLEN PHYSICS AND CHEMISTRY	WILLIAM E. DRAKE WOODWORKING
ADRIAN M. YARRINGTON HISTORY AND ENGLISH	WILLIAM C. STIMPSON MOLDING AND FORGING
Melville A. Marsh mathematics	George A. White Machine work
WILLIAM J. MCNEIL NATURAL SCIENCE	J. Frederick Hopkins mechanical drawing
GEORGE D. BARTLETT LATIN AND MATHEMATICS	Hendrik Van Ingen freehand and instrumental drawing
Hannah D. Mowry french	Emma R. Brill freehand drawing
WILLIAM SKARSTROM PHYSICAL CULTURE	Horatia B. Cunningham wood-carving
JESSIE A. LINES PHYSICAL CULTURE	Ellen L. Richards dressmaking
Charles W. Eaton	lessie H. Ditmars

DRESSMAKING

MECHANICS

HIGH SCHOOL—CONTINUED

S. ELLA HUNTINGTON MILLINERY

JENNIE F. BRETT SEWING

GLENTWORTH R. BUTLER, M.D.

HYGIENE AND HOME NURSING

ALICE D. GILLETTE

EMMA A. WINSHIP
SECRETARY TO DEPARTMENT

DEPARTMENT OF INDUSTRIAL AND FINE ARTS

WALTER S. PERRY . . . DIRECTOR

INSTRUCTOR IN HISTORY OF ART

S. HERBERT ADAMS

CLAY-MODELING, LIFE DRAWING

IDA C. HASKELL

ANTIQUE, COLOR, HEAD FROM LIFE

KATHERINE E. SHATTUCK

DRAWING, SKETCHING, NORMAL METHODS

MARY ALLIS HURLBUT

DRAWING, SKETCHING, COLOR

ETHELYN K. FENNER

LIGHT-AND-SHADE-DRAWING, SKETCHING, COLOR

DORA M. NORTON

LIGHT-AND-SHADE-DRAWING

I. Frederick Hopkins

MECHANICAL DRAWING, INSTRUMENTAL PERSPECTIVE

C. Frank Edminster

ARCHITECTURAL DRAWING

VINCENT C. GRIFFITH

HISTORY OF ARCHITECTURE AND DESIGN

GEORGE A. D. TEW

TECHNICAL AND APPLIED DESIGN

HORATIA B. CUNNINGHAM

WOOD-CARVING

MARY E. STOCKING

ART-NEEDLEWORK

HENDRIK VAN INGEN

ARCHITECTURAL DRAWING

MORRELL SMITH

ARCHITECTURAL DRAWING

WILLIAM CRAFTS

MECHANICAL DRAWING

CHARLES A. MEAD

MECHANICAL DRAWING

EMMA R. BRILL

FREEHAND DRAWING

HARRIETTE BOWDOIN

FREEHAND DRAWING

HENRY C. LEHMANN

FREEHAND DRAWING

Mattie E. Goss

ART-NEEDLEWORK

Martha S. Barrie

CHILDREN'S CLASS

HARRIET M. COX

SECRETARY TO DEPARTMENT

CLARA L. FAIRFIELD

SECRETARY TO DEPARTMENT

DEPARTMENT OF DOMESTIC ART

HARRIET S. SACKETT . . . DIRECTOR

HELEN M. BURGESS

DRESSMAKING

JESSIE H. DITMARS

DRESSMAKING

EMILY M. CHAPMAN

DRESSMAKING

Addie Louise Mead dressmaking

Elizabeth McJunkin

DRESSMAKING

ELLEN L. RICHARDS

DRESSMAKING

DEPARTMENT OF DOMESTIC ART—CONTINUED

MINNIE OLIVER

MILLINERY

ELLA F. CROMPTON

MILLINERY

S. ELLA HUNTINGTON

MILLINERY

EUNICE R. CAMPBELL SEWING

CLARA TRUMBULL

SEWING

JENNIE F. BRETT SEWING

MINNIE F. HUTCHINSON

SEWING

SOPHIE W. HAMILTON DRESSMAKING

ANNA M. BRETT

DRESSMAKING

Elna Heidenheim

DRESSMAKING

MARY L. SARGENT

DRESSMAKING

MARY B. SANFORD MILLINERY

ELIZABETH R. HALL

SEWING

ANET F. HUNTER SEWING

Jessie G. Whiting SEWING

EMMA R. BRILL

DRAWING

MARY WIGZELL

DRAWING

EMILY M. BISHOP

PHYSICAL CULTURE ADA A. M. PRATT

SECRETARY TO DEPARTMENT

SOPHIA E. WHITE

SECRETARY TO DEPARTMENT

DEPARTMENT OF DOMESTIC SCIENCE

EMMA O. CONRO DIRECTOR

SCIENCE APPLIED TO THE HOUSEHOLD

ALICE H. BECKLER

CHEMISTRY AND PHYSICS

GLENTWORTH R. BUTLER, M.D.,

PHYSIOLOGY; HYGIENE AND HOME NURSING; PUBLIC HYGIENE

GEORGE M. STERNBERG, M.D.,

BIOLOGY, HOAGLAND LABORATORY

Menco Stern

GERMAN

ALICE D. GILLETTE

COOKERY

MARGARET T. HAMMOND

COOKERY

ISABEL D. BULLARD

COOKERY AND LAUNDRY

BERTHA ESTEY

SUPERINTENDENT OF LUNCH ROOM

FANNIE U. BASSETT

SECRETARY TO DEPARTMENT

LOUISE FOWLER

STENOGRAPHER

DEPARTMENT OF SCIENCE AND TECHNOLOGY

CHARLES R. RICHARDS

DIRECTOR

CHARLES W. EATON

MECHANICS

CHARLES M. ALLEN

PHYSICS AND CHEMISTRY

MELVILLE A. MARSH MATHEMATICS

WILLIAM J. McNEIL

NATURAL SCIENCE

DEPARTMENT OF SCIENCE AND TECHNOLOGY—CONTINUED

George D. Bartlett

MATHEMATICS

...,

C. Howard Parmly

ELECTRICAL CONSTRUCTION

Douglas Burnett

PHYSICS

Louis E. Ackerman

PHYSICS AND CHEMISTRY

Frank G. Robinson

CHEMISTRY

RUDOLPH SELDNER

CHEMISTRY

WILLIAM E. DRAKE

WOODWGRKING

WILLIAM C. STIMPSON

MOLDING AND FORGING

GEORGE A. WHITE

MACHINE WORK

TAY B. LAMPMAN

MACHINE WORK

CHARLES H. TIEDMAN

CARPENTRY

JOHN TODD

PLUMBING

GEORGE HEATH

PLUMBING

P. WILLIAM NELSON

FRESCO PAINTING

CHARLES CARLBERG

FRESCO PAINTING

TAMES H. KELLY

HOUSE AND SIGN PAINTING

EDWIN W. FOSTER
SECRETARY TO DEPARTMENT

DEPARTMENT OF COMMERCE

NORMAN P. HEFFLEY

. Director

LULU NASE ESMOND

PHONOGRAPHY

ISABEL GILLESPIE

PHONOGRAPHY

CAROLINE WYLIE

PHONOGRAPHY

ALICE FAIRFIELD

PHONOGRAPHY

THOMAS P. HEFFLEY

TYPEWRITING

Emma B. Ludlow

TYPEWRITING

Morris L. Minir

BOOKKEEPING, ARITHMETIC, AND PENMANSHIP

Anna L. Clarkson

BOOKKEEPING

Erastus Palmer

ENGLISH

WILLIAM P. LEWIS

SPANISH

DEPARTMENT OF KINDERGARTENS

HANNAH D. MOWRY Associate Director

ALICE E. FITTS

FROEBEL PSYCHOLOGY, GIFTS, OCCUPATIONS, GAMES, FORM STUDY, AND COLOR

ALICE H. BECKLER

BOTANY AND ZOÖLOGY

John J. Dawson

MUSIC

KATHERINE E. SHATTUCK

DRAWING

EMILY M. BISHOP

PHYSICAL CULTURE

GLENTWORTH R. BUTLER, M.D.,

PHYSIOLOGY

DEPARTMENT OF LIBRARIES

MARGARET HEALY .

· . Director

MARY W. PLUMMER

LIBRARIAN

MARY L. AVERY

LIBRARY SCHOOL

AGNES E. LITTLE

LIBRARY

MARY C. MOSMAN

LIBRARY

SOPHIA L. BACON

LIBRARY

L. ATALANTA RAMSDELL

LIBRARY

SUSIE S. HAWKINS

LIBRARY

Annie Mackenzie

Julia C. Sturges

LIBRARY

ELIZABETH B. FAUCON

LIBRARY

HELEN J. AITKEN

LIBRARY

HETTIE D. ESLER

EDITH M. POMERGY

FLORENCE E. VAN VLIET

ASTRAL BRANCH LIBRARY

MABEL M. SMITH

ASTRAL BRANCH LIBRARY

HELEN I. STUART

STENOGRAPHER

DEPARTMENT OF MUSEUMS

I. FREDERICK HOPKINS ASSOCIATE DIRECTOR

THE THRIFT

I. HOLLIS GIBSON

ASSISTANT MANAGER

JOHN CARR MADDOCK

BOOKKEEPER

GENERAL OFFICE

NORMAN P. HEFFLEY Assistant Secretary

M. ADELAIDE BIRD REGISTRAR

ALFRED C. BEDFORD

AUDITOR

LILY NORTON

BOOKKEEPER

S. Louise Girod

STENOGRAPHER

HENRY R. DARBEY

LOUISE LIPPITT

ASSISTANT BOOKKEEPER

WILLIAM SPALDING

ASSISTANT BOOKKEEPER

NELLIE C. CARROLL

ASSISTANT STENOGRAPHER

JOSEPH FOSTER

ENGINEER





MAIN BUILDING

Pratt Institute

AIM AND SCOPE

RATT INSTITUTE was established after many years of investigation on the part of its founder, Mr. Charles Pratt, of Brooklyn. Its object is to promote manual and industrial education, as well as cultivation in Literature, Science, and Art; to inculcate habits of industry and thrift; and to foster all that makes for right living and good citizenship.

In accordance with these principles, the work of the Institute is prosecuted upon four several lines, with four distinct aims in view.

EDUCATIONAL, pure and simple: the purpose being the harmonious development of the faculties, as in the work of the High School.

- 2. NORMAL: the ultimate aim being the preparation of the student to become a teacher. Normal training is at present given in the Departments of Art, of Domestic Science, of Domestic Art, and of Kindergartens.
- 3. TECHNICAL: or special training to secure practical skill in the various branches of Industrial and Domestic Art, the Handicrafts, and the Mechanical Trades.
- 4. Supplementary and Special: intended for the benefit of those who wish to supplement the training of school or college by attention to special subjects conducing to more intelligent direction of domestic, financial, social, or philanthropical interests; such training as is given in the Kindergarten, Domestic Science, Library School, and other classes.

The Institute is provided with a liberal endowment, which enables it to make a merely nominal charge for tuition, and at the same time to secure the best talent and facilities for the accomplishment of its aim and purpose.

Pratt Institute occupies four large buildings—the Main Building, the High School Building, the Science and Technology Building, and the Trade School Building. Ground has already been broken for another building which shall contain large additional accommodations for students, as well as for the public features of the Institute work, such as the Museum, Auditorium, Lecture Halls, and Library.

The Institute is under the control of a Board of Trustees, with a Secretary as executive officer. It is divided into departments, the director of each being directly responsible for the work thereof.

Instruction is given to both sexes in day and evening classes. The terms for day classes extend from September to July, and for the evening, from October to April.

The first class was organized October 16, 1887, and numbered twelve pupils in drawing. At present there are nine different departments with a total enrollment of 3,940 pupils.

The registration for the year 1891-92 was as follows:

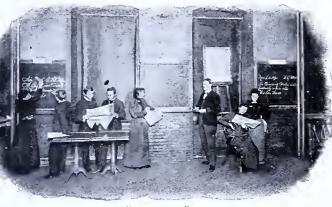
					Day.	Evening.	Total.
High School					144		144
Department of Industrial a	nd	Fine	Arts		559	333	892
Department of Domestic A	rt a	ınd So	cience		388	552	1,940
Department of Science and	łТ	echno	logy		80	232	312
Music Department .					89	244	333
Department of Commerce					133	2 93	426
Library Classes					43	• • • •	43
					2,436	1,654	4,090
In more than one departme	nt		•	•		•	149
Individuals enrolled .			•	•	•		3,941
Members of The Thrift							630
Members of The Library							16,500

CALENDAR 1893-94

DAY CLASSES.

First term							Sept. 25-Dec. 22.
Second term							Jan. 2–March 23.
Third term							April 2-June 22.
Evening Classes.							
First term							Sept. 25-Dec. 20
Second term							Jan. 2-March 23
Holidays,							
Thanksgivi	ng E	ay ar	nd the	follo	wing o	day.	
Election Day.						Good Friday.	
Washington's Birthday.					Memorial Day.		





"DAILY NEWS" CO.

HIGH SCHOOL

W. A. McAndrew,
Principal.

₿

THREE YEARS' COURSE FOR BOYS AND GIRLS



the equivalent of the work required to graduate from an ordinary grammar school. It includes a thorough and comprehensive training of mind and body, by means of the study of Language and Literature,

Mathematics, History, and the Sciences, along with extensive practice in Drawing, Tool-work, Domestic Science, Domestic Art, Music, and Physical Culture. The first aim of the school is to fit graduates for life work in general: the second, to prepare those who are to continue their education in advanced scientific or technical schools.

The Instruction is under the supervision of special departments of the Institute. Each teacher is accordingly a specialist.

The Buildings of the School are spacious, attractive, and well ventilated.

The Institute Library of 40,000 volumes is made a con-

stant aid to the work of the School.

The Work in Science is individual and experimental. The laboratories are five in number; devoted respectively to work in



11

Biology, Physics, Chemistry (with lecture hall), Strength or Materials, and Steam. Each accommodates twenty-five pupils at a time.

The Workshops are seven in number: joinery, lathe-room, forge-shop, foundry, tin-shop, vise-room for iron, and machine shop for iron, each accommodating twenty-five pupils at a time.

Special Facilities.—The studios, laboratories, kitchens, and class rooms of the Art, Domestic Science, and Science and Technology Departments, are used by the High School students.

The Gymnasium is equipped with a complete apparatus, and has a special teacher for girls and one for boys.

The Athletic Association, open to both boys and girls,



MECHANICAL DRAWING

has free tennis-courts, and fields for base-ball, foot-ball, archery, and general athletics.

Opportunities for GENERAL CULTURE in the form of Lecture Courses, Concerts and Entertainments in the halls of the Institute are numerous.

Practice of eye, brain, ear, and hand under intelligent supervision and friendly criticism, is in general, the method by which the instruction of the school is given.

Five Hours, five days in the week, are devoted to Recitation. Shop Work, and Drawing.

Three Hours of outside study is the maximum required for preparation of each day's lessons. Pupils requiring a longer time are insufficiently prepared for taking up the work of the school.

FAITHFUL WORK and satisfactory progress are strictly required as a condition of remaining in the school.

Examinations in Geography, United States History, Spelling, Grammar, Arithmetic, and Algebra (through simple equations), must be passed by all applicants before entering the school.



These are held on June 23-24 and September 18-19, 1893. Candidates for advanced standing must pass, in addition to the above, examinations on studies previously pursued by the class which they wish to enter.

The Expenses per term (three terms to each year) are: first year \$10, second year \$15, third year \$20. Pupils furnish their own books, drawing instruments, and shop suits.

COURSE OF INSTRUCTION

FIRST YEAR

LANGUAGE . . Composition. English classics

HISTORY . Ancient.

MATHEMATICS Algebra. Plane geometry.

Science Physical geography. Physiology. Botany.

DRAWING Freehand and instrumental working drawings; freehand, perspective, cast drawing, design, developments and intersec-

tions

MANUAL WORK For boys: Bench work in wood; wood-turning; pattern-

making.

For girls: -Sewing. Hygiene, and home nursing. Wood-

carving.

Music . Chorus singing.

PHYSICAL CULTURE

SECOND YEAR

LANGUAGE Rhetorical analysis. English classics.

HISTORY Mediæval and modern.

MATHEMATICS Plane and solid geometry. Trigonometry. Surveying. Science Physics, with laboratory

practice.

Drawing Historic ornament, clay

modeling, sketching and design, architectural and mechanical

drawing.



13

Manual Work . For boys :—Foundry molding; tinsmithing; forging.

For girls:—Dressmaking. Wood-carving.

Music . . Chorus singing.

PHYSICAL CULTURE

THIRD YEAR

Language . English literature; essays. French or German.

HISTORY . . Modern, Civics, Political economy.

Mathematics . Principles of construction.

Science . . Chemistry, with laboratory practice. Metallurgy.

Drawing . . . For boys :— Advanced freehand and mechanical drawing.

For girls: - Cast drawing, pen-and-ink sketching, water color

and design.

Manual Work . For boys :- Machine shop; vise work; machine tool work;

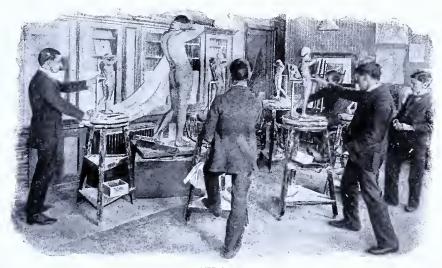
construction.

For girls:—Cooking. Dressmaking. Millinery.

Music . . . Chorus singing.

PHYSICAL CULTURE





LIFE CLASS

DEPARTMENT OF INDUSTRIAL AND FINE ARTS

Walter S. Perry, Director



HE object of the Art Department is to provide thorough and systematic instruction in the industrial and fine arts. The various divisions are as follows:

Regular art course

Normal art course

CLAY-MODELING

TECHNICAL DESIGN

ARCHITECTURAL DRAWING

MECHANICAL DRAWING

Wood-carving

Art-needlework

| Antique, life, anatomy, color, sketching, and composition. | Freehand and instrumental drawing, antique, color, design, clay-modeling, sketching, methods of teaching.

Ornament, antique, life, designing in the round.

Freehand drawing, color, decoration, applied design, technical methods.

Freehand and architectural drawing, historic styles, color, mathematics, and shop work.

Freehand and mechanical drawing, metallurgy, mathematics, mechanism, and shop work.

Freehand and instrumental drawing, design, clay-modeling, wood-carving.

Freehand drawing, color, design, art-needlework.

The Art Department occupies at present fifteen studios in the main building. In due time it will be transferred to the new building of Fine Arts, which will contain the Library, the Museum, the Auditorium, and twenty-four studios and class-rooms for the Art Department.

Class and department Lec-



WOOD-CARVING CLASS

tures are given on Perspective, Design, Historic Ornament, and Architecture, Color, Costume, Composition, Artistic Anatomy, and the History of Painting.

REGULAR ART COURSE-FOUR YEARS.

In the Regular Art Course, training is given in drawing from the antique, drawing the head and figure from life, anatomy, painting the head and figure from life, sketching, and composition.

NORMAL ART COURSE—TWO TO FOUR YEARS.

The Normal Art Course aims to prepare pupils to become teachers and supervisors of drawing in public and private schools.

The course of study comprises the greater part of the first two years' work of the Regular Art Course and, in addition, Clay-modeling, Water - color, Instrumental - drawing, History of Education and Normal Teaching Exercises.

CLAY-MODELING.

The work of the classes in Clay-modeling is in four divisions: the first supplements drawing from the antique and from life; the second, for students of the Normal Class, includes work from ornament, from the round, and from life; the third meets the requirements of pupils in the Architectural and Wood-carving Classes; the fourth, planned for evening students, gives artistic

> training, especially adapted to the needs of artisans and designers.

TECHNICAL DESIGN-TWO TO THREE YEARS.

This course provides thorough instruction in the principles of Decorative and Applied Design,





MECHANICAL DRAWING

and in the technical methods of practical application, and qualifies students as professional designers.

ARCHITECTURAL DRAW-ING—TWO YEARS.

The course in Architectural Drawing aims to qualify students to become architectural draughtsmen. It comprises Architectural Draughting, Freehand Drawing, Design, the History of Architecture, Theory of Construction, Mathematics. and Shopwork.

MECHANICAL DRAWING-TWO YEARS.

The course in Mechanical Drawing, aims to equip students as thorough and practical draughtsmen, and also to furnish them with a general knowledge of Mathematics, Metallurgy of Iron and Steel, Machine Construction, and Elementary Steam Engineering.

WOOD CARVING-TWO YEARS,

The course of study provides instruction in Wood-carving, Freehand Drawing, Design, Clay-modeling, and the principles of Construction. From simple objects students advance to cabinet-work and furniture, originating and applying their own designs.

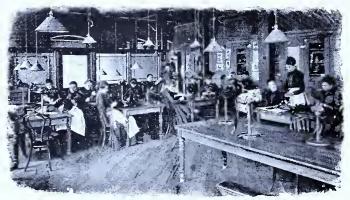
ART-NEEDLEWORK—TWO YEARS.

The object of this course is to teach the principles and

methods of Art-needlework, and to cultivate artistic taste in the choice of design, color and material, in articles for home decoration. A salesroom is connected with the department, the designs being furnished by a professional designer.



17



MILLINERY CLASS

DEPARTMENT OF DOMESTIC ART

Harriet S. Sackett, Director

HIS department provides comprehensive and systematic courses of study in those subjects which are related to the healthful and appropriate clothing of the body.

The laws of nature as interpreted by science and art are studied in their bearing upon the physical development and clothing of the human form. Such study leads to more healthful living, the cultivation of good taste, and wise economy, and supplements the education usually gained in school life.

The courses now given are Physical Culture, Sewing, Dressmaking, Millinery, and Drawing in connection with dressmaking and millinery. The courses of instruction are carefully graded not only to insure a thorough knowledge of the subject, but also to impress upon the pupil the value of order, accuracy, economy, and logical sequence. The methods of instruction are such as lead pupils to grasp the artistic and scientific principles underlying all good work, and encourage them to observe and judge for themselves, thereby gaining self-reliance.

EQUIPMENT.

The ten rooms devoted to the work of the department are large, well lighted and ventilated, and fully equipped with all apparatus essential to good work.

The rooms also contain casts of the best sculpture, photographs, colored plates of costume, and collections of textiles, as aids and incentives to artistic work.

TECHNICAL MUSEUM AND LIBRARY.

The Museum contains many specimens of textiles and materials in their crude and manufactured forms, which afford ample opportunity for study.

In the Library are to be found the best and latest books treating of Domestic Art, to which the pupil has access.

SEWING.

The course in Sewing includes all kinds of hand sewing, machine sewing, and the draughting, cutting, fitting, and making of under-garments, baby linen, and dresses of wash materials.

DRESSMAKING.

In the dressmaking course the pupil is first taught to

make street dresses, including the draughting and fitting of different styles of skirts and waists.

Then house and evening dresses, which embody artistic lines and harmony in coloring, are undertaken. The making of tailor-finished jackets completes the course.



DRESSMAKING CLASS

MILLINERY.

In this branch of the department instruction is first given in the making and trimming of all varieties of hats.

The method of making bonnets, toques, and turbans is next taught. In order to gain experience with the least expense, use is made of practice materials, such as colored cotton flannel, to represent velvet, and harmonizing shades of sateen to represent silk and ribbon. Later, more elaborate hats and bonnets are made, using choice materials.

Throughout the courses of sewing, dressmaking, and millinery, pupils furnish their own materials, and make articles for their personal use.

METHOD OF INSTRUCTION.

Instruction is given by means of class methods and recita tions, each pupil practically working out the principles of construction as learned and recorded in note-books. The work of each individual is carefully criticised and guided by the teacher.

FORM AND COLOR.

In order that the pupil may gain a knowledge of artistic design in relation to dress, a course in drawing is given in connection with dressmaking and millinery. This includes water-color sketches of hats and gowns.

Talks are given on the selection of fabrics, harmony of color, and artistic anatomy and form.

PHYSICAL CULTURE.

The development of a strong and graceful body is an important factor in the study of correct and artistic dress. The course in physical culture teaches the strengthening and freeing of the muscles, resulting in health of body, conservation of nervous energy, and grace of motion.

General exercises are given for energizing every part of the body and establishing correct habits of carriage, movement, and breathing.



CHILDREN'S SEWING CLASS



DEPARTMENT OF DOMESTIC SCIENCE

EMMA O. CONRO, DIRECTOR

The prosperity of a nation depends upon the health and the morals of its citizens; and the health and the morals of a people depend mainly upon the food they eat and the homes they live in. ELLEN H. RICHARDS.



F the national life thus depends upon the individual homes, the home demands the exercise of woman's best powers broadly and carefully trained.

That a purely intellectual culture has failed to accomplish with entire satisfaction the needful

preparation for the many-sided and serious demands of daily life, is a matter of common observation. That the culture is at fault. or that it is superfluous, no one believes; it is rather felt that something more is necessary. If, then, to a broad culture we add special instruction bearing directly upon health and life, the desired end is perhaps attainable.

With constant reference to health as the chief object sought, the purpose in the following Domestic Science courses is to afford training and instruction in these special subjects, which must be considered in the daily administration of every home.

To meet the varied needs of students in these lines, Educa-

tional and Technical courses, affording both theoretical and practical instruction, are offered. The Educational section includes a Normal course and special courses in household science, emergencies, hygiene and home nursing, and cookery, while the Technical section offers simply practical instruction in cookery and laundry-work.

EDUCATIONAL SECTION.

The Normal course, which requires two years for its completion, aims to meet the increased demand for teachers thoroughly trained in Domestic Science. The work of the course, satisfactorily completed, will qualify pupils to fill positions as instructors in Domestic Science in private and public schools and in colleges.

Instruction is given by means of lectures and recitations, supplemented by as much laboratory work as the best methods demand. Each branch of the work is under a specialist, and is often conducted in other departments than the Domestic Science.

Large, well-appointed Chemical and Physical Laboratories, attractive kitchens, valuable charts and models, an extensive Library and a rich Museum, here constitute an efficient equipment for theoretical and practical work.

LECTURES.

The Normal work is supplemented by a series of lectures, open to the public, given by special investigators and acknowledged authorities in their respective fields.

CURRICULUM.

The course of study includes German; Physics (energy

and heat); Chemistry (general, qualitative, and quantitative); Chemistry of foods, Chemistry of Cooking and Calculation of Dietaries; Biology (Bacteriology, Physiology); Emergencies; Hygiene and Home Nursing, and



2

Public Hygiene. The applied work includes courses in cookery, laundry-work, and sewing.

The field work includes a study of manufacturing processes. Through this real knowledge of commercial methods, is acquired a valuable fund of information of practical use.

Lectures upon Psychology and the History of Education, together with instruction in normal methods, observation of class work, and practice in teaching, receive due attention throughout the two years.

A brief consideration of some of the more conspicuous branches of the Normal work will reveal something of its philosophy.

A trained intelligence being the aim, subjects contributing alike to training and to technical acquirement are fundamental. By following the steps which all properly-conducted laboratory work involves, the study of Physics and Chemistry will develop the daily demanded power to observe, to compare, to con-



COOKING CLASS

clude. Among the desirable habits formed will be those of system, accuracy, and economy. Aside from this inestimable training of mind and hand, any serious consideration of psychology and of foods requires the technical acquirement which these subjects confer.

The chemistry of cookery and of foods, the study of ferments, of food adulterations and their tests, naturally follow as the resultant of the previous studies.

The bearing of Bacteriology upon Sanitary Science renders desirable a scientific and practical study of this side of Biology.

Primarily the purpose is to show that cleanliness is a first condition of sanitation.

COOKERY.

The ideal diet is that combination of foods, which, while imposing the least burden upon the body, supplies it with exactly sufficient nutriment to meet its needs.

Dr. Schuster.

The aim of the work in this direction is to illustrate applied science—Physics, Chemistry, and Physiology.

The instruction based upon laboratory methods is both theoretical and practical. The chemical, physiological and economic consideration of foods, forms a parallel course with the instruction in the culinary treatment.

Occasional papers are required, treating of various food ingredients and foods. The composition, sources, chemical and physical tests, microscopic features, food value, and cost, are some of the topics discussed.

A nutritive, attractive, and varied bill of fare, at a minimum cost, is another form of written work occasionally required.

TECHNICAL SECTION.

In contradistinction to the study of cookery as applied science, is its study as an art only.

To meet the requirements of students who desire only practical instruction, the following courses, elementary and advanced, are offered.

LAUNDRY-WORK.

The instruction in this course embodies the practical treatment of every variety of article, from bed-linen to the most delicate colored silk embroidery.



COOKERY



CHEMISTRY

DEPARTMENT OF SCIENCE AND TECHNOLOGY

CHARLES R. RICHARDS, DIRECTOR



HIS department affords instruction in various scientific and technical subjects, as well as a practical training for the principal mechanical trades.

To carry out this work, the department is equipped with a series of Shops and Laboratories, which are

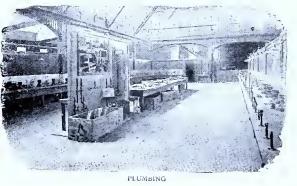
supplied with every appliance that can in any way enlarge the scope and promote the efficiency of the instruction.

The various divisions are as follows:

SCIENCE AND TECHNOLOGY

ALGEBRA	Simple equations, factoring, fractions, quadrati
Geometry	Elements of plane and solid geometry, application to methods of drawing and construction, practical problems.
Puysics	J Mechanics heat sound color electricity
CHEMISTRY	Chemical combinations, inorganic elements and compounds, qualitative and quantitative analysis, as saying.
ELECTRICAL CONSTRUCTION	Dynamic electricity, magnetism, applications to en- gineering.

Steam and the steam-engine { Theory of engine; combustion and steam generation; construction, tests and measurements. Behavior under strain; resistance to tension, compression, shearing and bending; application to building and machine construction. Elements of mechanism: transmission of motion; bearings, friction-gearing, belting, cams, screws, linkwork, etc.; details of construction.
MECHANIC ARTS
CARPENTRY Care and use of tools; methods of laying out work; joint-work, framing, details of house-building.
Machine-work Filing and fitting; work on engine-lathe, plaining-machine, shaper, drill, milling-machine and grinding machine.
PLUMBING
HOUSE-PAINTING Preparation of surfaces, mixing paints, plain painting on wood, brick, and plaster; varnishing, hardwood polishing, polish white, gilding, lining, graining, paper-hanging.
Sign-painting Preparation of surfaces, spacing, plain lettering; ornamental lettering in gold and colors; painting on glass and metal.
Preparing walls and ceilings for calcimine; lining; laying out work; making and applying pounce and stencil; putting on flat and shaded ornament; study of design, with practice in freehand drawing, drawing and painting of cast ornament, study of historic ornament, composition of ornament for



Although the chief aim of the various courses is to afford instruction of direct value in industrial and technical pursuits, they also serve to continue in certain lines the education of all

wall and ceiling decoration.

whose school training has been necessarily limited.

ALGEBRA.

The primary object of the course is to give an elementary training which will allow the student to take up the study of



scientific and technical subjects, such as those named below:

GEOMETRY

The course is suitable for those who wish to acquire an elementary knowledge of the subject for practical purposes, or as a foundation for further study.

PHYSICS.

Throughout the course individual practice is afforded in the thoroughly-equipped Physical Laboratory, where many experiments are performed, and the principles brought out in the lecture-room are studied at first hand.

CHEMISTRY.

The course provides for consecutive work for three years. Theoretical instruction is given by means of lectures and recitations, and is followed at each session by individual practice in the Laboratory.

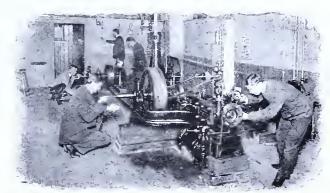
ELECTRICAL CONSTRUCTION.

The Laboratory work deals with the verification of the laws brought out in the lecture-room, and affords continuous practice in the use of measuring instruments, the voltmeter, ammeter, and Wheatstone bridge; and experimental study of the

action of both continuous alternating current dynamos and motor.

STEAM AND THE STEAM-ENGINE.

The Laboratory is equip-



MACHINE DESIGN

ped with a ten-horse-power horizontal engine, and a vertical engine of the same power, specially arranged for experimenting; also a hydraulic friction-brake, condenser, weighing-tanks, indicator, etc. Practice is obtained in setting slide-valve, taking indicator cards, and calculating horse-power and other data from the same, and in making efficiency tests of both boilers and engines.

STRENGTH OF MATERIALS.

The Laboratory is furnished with a 35,000-pound Olsen testing-machine, a cement testing-machine, and a quantity of apparatus for individual experimentation.

MECHANIC ARTS.

Instruction is this department aims to give a thorough grounding in the principles of a mechanical trade, and sufficient practice in its different operations to prepare for active work. This end is reached by providing systematic courses of practical work, in which the reason for each step is carefully explained, and by frequent talks upon methods and material. Both day and evening classes are in operation.

In the day class sufficient length of time is devoted to continuous practice, to prepare beginners for practical work at the trades.

The evening classes aim principally to broaden and extend the training of those already engaged at the trades.



SIGN AND FRESCO PAINTING

DEPARTMENT OF COMMERCE

Norman P. Heffley, Director



TYPEWRITING CLASS



ECOGNIZING the fact that business transactions enter into every phase of modern life, and that this is essentially an age in which great commercial activity prevails, the Department of Commerce was organized for the purpose of giving more thorough instruction

in studies pertaining to business and commercial operations.

The courses of instruction at present are:

REGULAR COMMERCIAL COURSE	History; commercial, physical and industrial geo- graphy; commercial law; mechanical drawing; political economy; civics; English; bookkeep- ing, or phonography and typewriting.
Phonography	Business, legal, and general reporting; English; punctuation; correspondence.
Typewriting	Drill for business and general copying purposes; spelling; correspondence; manifolding; mimeographing.
BOOKKEEPING	All kinds of wholesale and retail business; jobbing; commission; banking; business practice.
Arithmetic and penmanship	Interest; percentage; discount; short methods; rapid calculations.
English	Grammar; rhetoric; correspondence; composition.
Spanish	Grammar; conversation; correspondence; composition.

Lectures are given at stated intervals upon the history, de-

velopment, theory, and practice of the various subjects taught in the Department.

REGULAR COURSE.

The importance of possessing a more thorough commercial training than has heretofore been attainable by persons contemplating entering upon a business career, is more appreciated each year. It is not essential for a young man entering business to be a college graduate, but he ought to be a high-school graduate. The clerk of this decade will be manager or partner in the next, and it is evident that the more thorough his preparatory training, the better qualified will he be to achieve future success. Boys are,



BOOKKEEPING CLASS

as a rule, so anxious to leave school and obtain employment, that they think they cannot afford the time necessary to acquire a high-school education, and devote a year or two in addition to commercial studies. The remedy for this is the establishment of schools to take the grammar-school graduate and give

him a two or three years' course in combined high-school and commercial work. Our Regular Course is designed to meet this demand.

PHONOGRAPHY AND TYPEWRITING.

Within a comparatively short time, there has grown to be such a demand for shorthand and typewriting amanuenses in business, that a practical knowledge of shorthand and typewriting is now regarded as a necessary branch of business education. This demand has induced many persons to undertake these studies who were not qualified to become successful in their practical application. In order to secure the best results, no student under the age of seventeen is accepted, nor any who cannot pass a satisfactory examination in composition and English.

These two studies, although totally different in character, are so closely allied in practice that a knowledge of both is requisite, and the aim of the Department is to give persons desiring to become amanuenses a thorough and practical training in the same. A special feature is made of punctuation, capitalization, paragraphing, and itemizing, and of intelligent revision of poorly-dictated sentences; also of dictation of matter bearing upon stenographic work as regards neatness, proficiency, perseverance, intelligence, common-sense business ways, and courtesy.

The system of phonography taught is known as the Benn Pitman system—arranged especially for pupils of the Institute—the course being divided into three grades. Each grade covers a term of three months, and students desiring to enter succeeding grades are obliged to pass an examination on the work of previous grades. The course of study in typewriting, which covers a period of three months, is usually taken in connection with the study of phonography, and may be pursued at the same time.

BOOKKEEPING.

The science of bookkeeping, or accountantship, in its broadest sense, is the basis of all business education. The importance of this work led to the establishment of classes in which the principles of the science and their application are thoroughly taught. The aim is to give a comprehensive understanding of the systems of double-entry books required in different kinds of wholesale and retail business; also jobbing, shipping, and commission, installment business, joint-stock companies, corporations, and manufacturing concerns. Single entry is explained

in its relation to double entry. Special drill is given in journalizing, analysis of accounts, detecting errors in trial balances, short methods in interest, discount, multiplication, etc., rapid addition, and computations generally.



3

The students are also made familiar with business terms, transactions, correspondence, and all forms of commercial paper.

ARITHMETIC AND PENMANSHIP.

The importance in all departments of commercial life of accuracy in figures, and of good penmanship, is fully recognized. The subject of Arithmetic is presented from a business point of view, and the short methods employed are especially valuable in securing ease and rapidity in computations; while Penmanship is taught in a practical manner, with a special view to acquiring a good business hand. Particular stress is laid upon fractions, percentage, interest, discount, commission, exchange, equation of accounts, banking, stocks, etc.

ENGLISH.

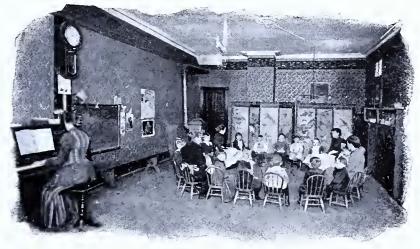
The instruction includes the elements of language, and the simplest forms of rhetoric. The composition work consists of descriptions, narratives and letters, while common grammatical and rhetorical errors are corrected as they present themselves. The theory of punctuation is carefully developed. The requirements of social and business conversation and correspondence are continually presented to the student's attention, and the needs of those who are already engaged in business are considered, as well as of those preparing for commercial pursuits.

SPANISH.

In view of the present and prospective trade relations between the United States and the Central and South American countries, and because of the fact that this language has not



yet received the attention which, from its commercial importance it merits, classes in Spanish have been organized to prepare students for positions as stenographers, salesmen, and clerks who are able to correspond and converse in Spanish.



FREE KINDERGARTEN

DEPARTMENT OF KINDERGARTENS

HANNAH D. MOWRY, ASSOCIATE DIRECTOR



HE aim of the Kindergarten Department is to give to all women who desire to become professional kindergartners a thorough training for their work; to help mothers to understand the psychological development of the child, and to appreciate the kin-

dergartner's aim, so that mother and teacher may work in harmony; and to give to every woman a higher self-culture and power for usefulness.

THE REGULAR COURSE.

This extends throughout two school years, those persons only being accepted who have previously received a good English education. The outline of work is comprehen-

sive, including the study of Art and Science, in connection with the regular Kindergarten Games, Gifts, Occupations, Songs, and Stories. Lectures on Psychology and Education are given to the



33

advanced classes. These aim to give deeper insight, and broader knowledge of the underlying principles of the new education.

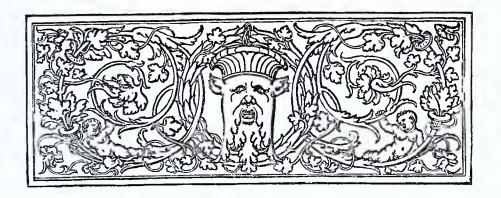
Classes are arranged to meet the needs of special students, whether Kindergartners, teachers, or mothers.

MOTHERS' CLASSES.

"The work of education really begins with the birth of the child, and must be at first pursued in the family." In accordance with this principle classes have been formed to study Froebel's book for mothers, known as "Mother Play and Nursery Songs," or "Mutter und Koselieder." This book deals with the very first training of the child's body, his limbs and senses, as well as with that of his soul, his mind, and his whole inner nature. In connection with this study are given instructions in the Gifts, Games, and Occupations of the Kindergarten, as best adapted to the family. Thus the interests of the child are consulted by both mother and teacher working in harmony.



SCIENCE CLASS



DEPARTMENT OF MUSEUMS

J. Frederick Hopkins, Associate Director



HIS Department has for its purpose the acquisition, classification, and exhibition of the collections of illustrative material required by the work of the Institute. It is organized broadly under three subdivisions, namely, the Artistic, Industrial, and Phy-

sical Sections.

The Artistic collections are located, for the present, in the various rooms of the Art Departments, or are arranged on the walls of the halls and classrooms throughout the building. These collections consist of representative casts of Historic Architecture, Sculpture and Ornament; Bronzes, Ceramics, Textiles, etc.; and a large number of Photographs, Engravings, and Lantern Slides, illustrative of art development of all ages.

The Industrial collections are arranged in suitable cases in a spacious hall in the main building, and are designed to illustrate, by means of specimens and models properly classified and labeled, the consecutive stages through which materials of various kinds pass in their transition from the crude state to the finished article. With these strictly technical collections are placed, wherever possible, a sufficient number of artistic examples to show toward what result all industrial labor should aspire.

The Physical Section includes the organic and inorganic collections necessary to illustrate the scientific work of the Institute, and is disposed at present, partly in the Museum Hall and partially in the different classrooms. This section contains sets of rocks and minerals representing the materials of which the earth is composed, and from which almost all inorganic substances used in the arts are obtained.

All the specimens under the control of this Department are intended to be used in illustrating the lectures and class work of the Institute, and while generally displayed in their usual location, are loaned from time to time to whatever Departments may require their use.





FREE LIBRARY, READING-ROOM, AND REFERENCE ROOM

MARGARET HEALY, DIRECTOR



HE Library endeavors to keep pace with the growth of the Institute by adding constantly to its shelves the best books in general literature as well as those of a technical nature. It has two functions to perform; that of a Reference Library for the students and

teachers of the Institute, and for all to whom it can be of service in this way; and that of a Free Circulating Library which ministers to the entertainment as well as instruction of the general public. Its fiction is chosen with care, in order that even in the province of entertainment it may be a real help to the community.

At present it numbers some 40,000 volumes, while the reading-room contains about 175 of the leading American, English, French and German periodicals.

The reference-department comprises about 900 works of reference, in addition to between 4,000 and 5,000 bound volumes of periodicals, and many government documents of use to the stu-

dent. The reference-shelves are free to all readers, tables are provided for greater ease in consulting books and taking notes, and assistance in looking up information may be had whenever needed.



31

All departments of the Library are free to residents of Brooklyn who offer a responsible citizen as guarantor; and persons visiting the city for a month or longer may have the same privileges if provided with the same kind of guarantee. Extra privileges are given to teachers. Children under fourteen years of age may have cards of membership, but must draw books from a special list prepared for the purpose by the Library authorities.



READING ROOM

This restriction, however, does not deprive the child of entertaining reading.

CLASSES.

The difficulty of finding trained assistants was experienced in the first year of the Library's existence. Classes in library training were organized in 1890, and each succeeding year

has seen improvements in the course. The branches taught are Cataloguing, Library Economy, Reference Work, and General Literature. The last two, though included in the work in Library Economy, are also open to the public.

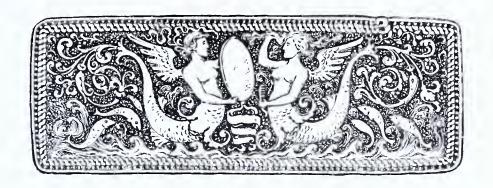
The course in Cataloguing, as well as that in Library Economy, occupies six months, from October to March inclusive, in terms of three months each. It is followed by an apprentice-ship term of three months for all students whose progress and standing warrant the privilege.

BRANCHES.

The Astral Library, Java Street, has a collection of over 2,000 volumes, and is also a delivery station for books from the main Library, which are sent out daily as called for.



38



THE THRIFT

J. Hollis Gibson, Assistant Manager



HE work that The Thrift does is to encourage its members to form habits of saving; to help them to become prudent and wise in the use of money and time, by offering them a safe and simple method by which they may make regular monthly pay-

ments for the purpose of accumulating a fund for buying homes for themselves; and to loan to such persons as wish to borrow for this purpose.

Any person, whether an attendant at the Institute or not, may become a member of The Thrift upon complying with the regulations.

The Thrift is divided into three branches—the Investment Branch, the Deposit Branch, and the Loan Branch. Persons may avail themselves of any branch without becoming identified with the others.

Investment accounts are opened to receive regular monthly payments.

One share at \$1 per month, for ten years, with interest at

5 per cent. per annum, will amount to \$150. At the end of ten years a premium of \$10 a share will be paid.

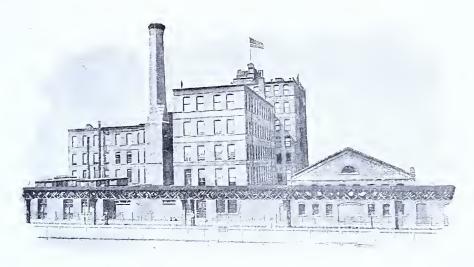
Deposit accounts for \$5 or over are opened for those who do not desire to bind themselves to a regular monthly payment. Subsequent deposits will be received at any time in sums not less than \$1.50. Interest at 4 per cent. per annum will be allowed on all sums exceeding \$5.

Stamps of five, ten, twenty-five and fifty-cent denominations may be purchased at any time at the office of The Thrift. These stamps are to be attached to stamp cards, which will be received as payments on subscription or deposit accounts, and the amount transferred to the depositor's pass book.

In the Loan Branch, sums of any amount will be loaned for the purchase of private houses, shops, and other real property in Brooklyn; but it is the special object of The Thrift to encourage the purchase of dwelling houses by persons *for their own occupation*.

Loans are repayable by monthly installments which shall totally extinguish principal and interest; and when they are all paid, the house will become the property of the borrower, free from liens.





REAR VIEW

GENERAL REMARKS

LECTURES.



N important feature of the Institute is its system of Lecture Courses. It is intended that these shall bear directly upon the work of the Institute in all its phases, thus including practical instruction upon those matters which pertain to right modes of liv-

ing, the problems of Political and Social Life, Domestic Economy, Sanitary Science, Literary Culture, Ethics, etc.

While many of these courses may be given to pupils only, as a part of the regular work of the Institute, yet many others will be so arranged as to meet the wants of those not otherwise connected with the Institute, who wish the opportunity to obtain systematic instruction upon subjects of interest and importance.

CHORAL SOCIETY.

The object of this Society is to encourage a more general appreciation and use of vocal music among the people. Vocal music is recognized as a valuable aid to moral, intellectual, æsthetic, and physical development. The system of notation used is the Tonic Sol-Fa, and as the Society is composed of certificated sol-faists, each member is an intelligent reader of music. Works

of the best class are studied, and concerts are given from time to time at nominal rates of admission.

PHYSICAL CULTURE.

Systematic instruction in physical culture is given to all students of the High School and to all members of the Athletic Association.

The Gymnasium is located in the basement of the High School Building, and is thoroughly equipped with apparatus and facilities for the development of physical health, beauty and strength.

In addition to the Gymnasium, the Institute possesses several acres of ground which are utilized for tennis, ball, and other games.

LUNCH ROOM.

In the basement of the main building is a commodious lunch room where simple meals, well served, are furnished noon and evening at moderate prices.

OFFICE HOURS.

Daily, except Saturday . . . 9.00 A. M. to 5.00 P. M. Saturday 9.00 A. M. to 3.00 P. M. Evenings, Monday, Wednesday, and Friday . . . 7.30 P. M. to 9.00 P. M.

Further information may be obtained from the Catalogue, or upon application in person or by letter at the office of the Institute, Ryerson Street, between DeKalb and Willoughby Avenues.

Address: Frederic B. Pratt,

Secretary.

Brooklyn, N. Y., May, 1893.



